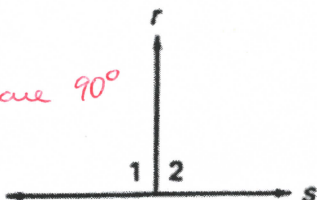


What can you conclude from the given information? State the reason for your conclusion.

1.  $\angle 1 \cong \angle 2$

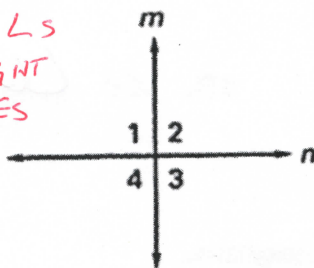
$r \perp s$

$\angle 1 + \angle 2$  are  $90^\circ$

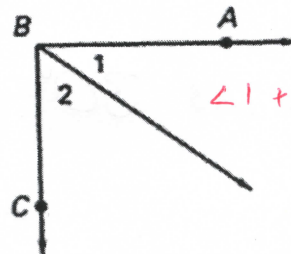


2.  $n \perp m$

ALL 4  $\angle$ s  
ARE RIGHT  
ANGLES



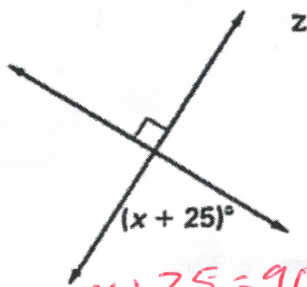
3.  $\overrightarrow{BA} \perp \overrightarrow{BC}$



$\angle 1 + \angle 2 = 90^\circ$

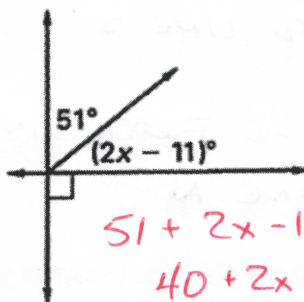
Find the value of  $x$ .

4.



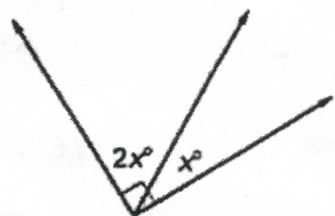
$$\begin{array}{r} x + 25 = 90 \\ -25 \quad -25 \\ \hline x = 65^\circ \end{array}$$

5.



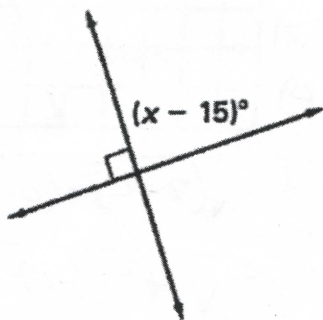
$$\begin{array}{r} 51 + 2x - 11 = 90 \\ 40 + 2x = 90 \\ -40 \quad -40 \\ \hline 2x = 50 \\ x = 25^\circ \end{array}$$

6.



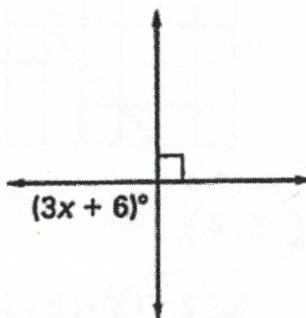
$$\begin{array}{r} 2x + x = 90 \\ 3x = 90 \\ x = 30^\circ \end{array}$$

7.



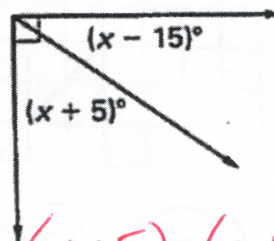
$$\begin{array}{r} x - 15 = 90 \\ x = 105^\circ \end{array}$$

8.



$$\begin{array}{r} 3x + 6 = 90 \\ 3x = 84 \\ x = 28^\circ \end{array}$$

9.



$$\begin{array}{r} (x + 5) + (x - 15) = 90 \\ 2x - 10 = 90 \\ 2x = 100 \\ x = 50 \end{array}$$

Find the measure of the indicated angle.

10.  $\angle 1$   $90^\circ$

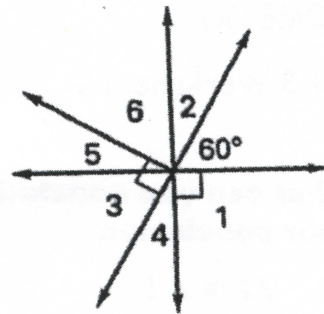
11.  $\angle 2$   $30^\circ$

12.  $\angle 3$   $60^\circ$

13.  $\angle 4$   $30^\circ$

14.  $\angle 5$   $30^\circ$

15.  $\angle 6$   $60^\circ$

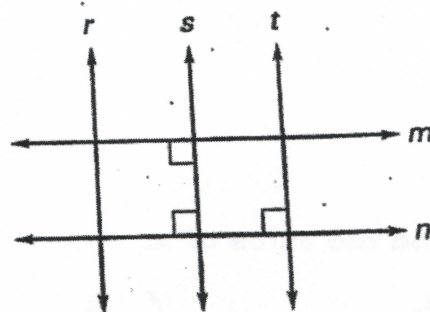


In Exercises 16–18, use the diagram.

16. Is  $r \parallel s$ ? CAN'T DETERMINE, WE DON'T KNOW ANY ANGLE MEASUREMENTS

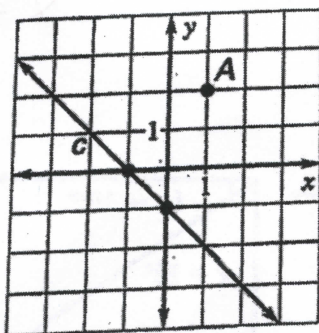
17. Is  $m \parallel n$ ? YES BECAUSE BOTH LINES ARE  $\perp$  TO LINE  $s$

18. Is  $s \parallel t$ ? YES BECAUSE BOTH LINES ARE  $\perp$  TO LINE  $n$



Find the distance from point A to line c. Round your answers to the nearest tenth.

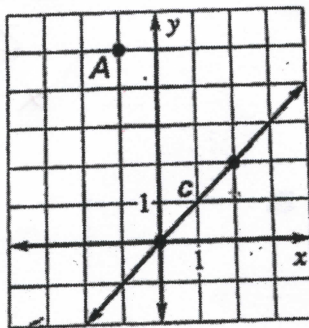
19.



$(-1, 0)$   
 $(1, 2)$

$$\begin{aligned} d &= \sqrt{(1 - (-1))^2 + (2 - 0)^2} \\ &= \sqrt{2^2 + 2^2} \\ &= \sqrt{4 + 4} \\ &= \sqrt{8} \\ &\approx 2.8 \end{aligned}$$

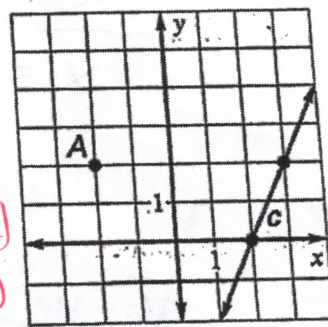
20.



$(-1, 5)$   
 $(2, 2)$

$$\begin{aligned} d &= \sqrt{(2 - (-1))^2 + (2 - 5)^2} \\ &= \sqrt{3^2 + (-3)^2} \\ &= \sqrt{9 + 9} \\ &= \sqrt{18} \\ &\approx 4.2 \end{aligned}$$

21.



$(-2, 2)$   
 $(2, 0)$

$$\begin{aligned} d &= \sqrt{(2 - (-2))^2 + (0 - 2)^2} \\ &= \sqrt{4^2 + (-2)^2} \\ &= \sqrt{16 + 4} \\ &= \sqrt{20} \\ &\approx 4.5 \end{aligned}$$